

Eat more fish, spend less time on the analyst's sofa

Seeing those wrappers with the text 'contains omega-3' on dairy products in the supermarket no longer surprises anyone. That means it is time to scrutinize the actual effects of this fatty acid. Psychiatrist Michael Maes believes that omega-3 will present new therapeutic options for those of us who are plagued by psychological ailments.

'Even though Iris is only thirty-two, she feels at least twice as old. Because she is smart and determined, she became director of a mid-size company with sixty employees. Regardless of her professional success, Iris is not happy. This has been going for three years now, and during those three years, she has been seeing doctors, psychiatrists and psychotherapists. She took the antidepressants Prozac, Temesta, Valium and a series of other pills, and for the past three months, she has been on Seroxat. When you ask her if she has been making any progress, she looks worried. Her energy levels seem to be depleted, she is irritable and no longer dares to leave the house to go to work. She can no longer handle things at home. More and more frequently, she is overcome by wistful bouts of crying. She cannot fall asleep because of the dark thoughts that cloud her mind. Her body is aching, her muscles and joints creak, and her neck glands are swollen. Sometimes she feels too hot, and moments later she is shivering. She thinks that her body no longer functions the way it is supposed to.

'Her current psychiatrist says she does not react to conventional medication of antidepressants and lithium. Yet, she seems to be saddled with the annoying side effects of the medication: weight gain, shaking, thirst and constipation. During sessions on the psychoanalyst's sofa, she is told that she has built up too much resistance against therapy. He thinks she does not cooperate sufficiently and that creates strong feelings of guilt. She wants things to improve of course, for herself, for her husband, and for her children. If she only knew how.'

This is a brief overview of Iris' case (her name has been changed) as told to me by Prof. Dr. Michael Maes, neuropsychiatrist and founder of some new outpatient clinics for the treatment of patients suffering from depression, chronic fatigue syndrome (CVS), the rheumatic disorder fibromyalgia, burnout, autism and ADHD. Iris is one of the first patients who walked into his new outpatient clinic in Lanaken. Her story is typical of many of the patients who have visited Prof. Maes' clinic. They have tried out a series of unsatisfactory therapies, and often have no idea what is exactly wrong with them. Prof. Maes further discusses Iris' case. 'Iris was looking for an adequate diagnosis as a first step towards a more effective treatment. We proceed as follows in our outpatient clinic. First we take blood, urine and stool samples for analysis. When I talk to Iris, she tells me there is no immediate cause—not even a psychological cause—for her condition. I examine the samples and gather information about her immune system, the profile of the fatty-acids, her metabolism, infections, intestinal problems, vitamins, hormones and allergies.'

The fact that Prof. Maes does this type of examination when facing patients who have similar complaints to Iris' is noteworthy. He wants to locate the biological causes that underlie his patient's conditions and looks at metabolic disorders, hormonal imbalance, an overactive immune system and such annoying afflictions as infections, nutritional deficiencies, and stress. Conventional psychiatrists shy away from doing such examinations. Why does Maes insist on doing them? In 1996, his scientific research showed that half of the patients who were suffering from depression had insufficient levels of the essential fatty acid omega-3. This fatty acid had already captured attention in the scientific community. In 1993, the French physician Michel de Lorgeril showed that a diet rich in omega-3 decreased the mortality rate in patients who had had a heart attack. In the first two years after their heart attack, mortality

rates decreased by 75%. Prof. Maes also looked at another study. 'We already knew that depression correlates with disturbances in serotonin levels. Animal studies have shown that rats with deficient omega-3 levels also have abnormal serotonin levels. Consequently, the hypothesis that omega-3 could play a part in the occurrence of depression was obvious. When we investigated the differences in the profiles of fatty acids in both psychologically healthy and depressive people, the hypothesis proved to be correct. The National Institutes of Health in Washington followed this lead and noticed a relationship between consuming fatty fish and suicidal feelings. Fish oil is a natural source of omega-3. In countries like Japan and Korea where fish is an important staple of the daily diet, depression and suicide occur less frequently. In Belgium, Hungary and America, people prefer consuming meat rather than fish, and the figures for depression and suicide are significantly higher.' It was clear to Prof. Maes that patients with psychological complaints would not only benefit from a careful clinical examination; they should also be checked and if necessary treated for biochemical abnormalities. 'A large part of our brain consists of fats. The cell membranes consist primarily of omega-3, omega-6 and cholesterol. Omega-3 is responsible for the proper functioning of brain cells so that sufficient levels of serotonin are produced. The balance between these various fats is extremely important as well.'

Omega-3 also plays an important part in the patient's immunological profile. 'Omega-3 fatty acids have an anti-inflammatory effect that has already been investigated in cardiovascular disorders. Depression and chronic fatigue syndrome often involve inflammation caused by a disturbed immune system. For one reason or another, the immune system in these patients is overly active. This overly active system leads to never ending fatigue.'

Two weeks after she visited Prof. Maes, Iris is due for a follow-up visit. Her doctor tells her quite a different story than what she has heard before. Instead of immediately labelling her as depressive or suffering from chronic fatigue syndrome, Prof. Maes first focuses on the possible causes of Iris' complaints such as disorders of the immune system (i.e. auto-immunity), increased oxidative stress, and infection with borrelia. Prof. Maes explains....

Iris is presented with a therapy plan. Besides Seroxat, she also has to take antibiotics to get rid of the bacteria, large quantities of antioxidants (nature products) to decrease auto-immunity, and large quantities of omega-3 fatty acids. Prof. Maes gives her capsules of fatty acids. 'When patients take pills, we know exactly what their intake is, and we can be sure that the fish oil is pure. That level of purity cannot be guaranteed with fish from the ocean. We prefer capsules from **Minami Nutrition**, a company that has an excellent quality control process in place. **Minami Nutrition** is a Belgian company whose products are available worldwide.'

All of this sounds very attractive from a commercial point of view, doesn't it? Just look at all those margarine brands that are eager to let you know their product contains omega-3. According to Prof. Maes, the scientific findings have reached the manufacturers of margarine, but doctors and psychiatrists have not received the message yet. Aren't pharmaceuticals enticed by this enormous potential market? Prof. Maes: 'The pharmaceutical industry spends big money on antidepressants. Research that involves cheap fatty acids carries a limited appeal for them. A patient who takes large quantities of omega-3 only has to spend 25 Euro per month. Because omega-3 treats schizophrenia, ADHD, autism, fibromyalgia and burnout, the market is indeed considerable. However, only those who suffer from depression have to take high doses of fish oil; the majority of the population doesn't. If you do not have specific complaints but want to stay in optimal health, you should take one capsule of **MorEPA** per

day and stick to a healthy diet. We all know that eating less fries, fewer hamburgers and more fish makes for a much better diet. ’

Should you be alarmed when bread buttered with margarine is part of your daily diet? Not at all. You should only be alarmed if you are suffering from long-term exhaustion that doesn't seem to have a specific cause because in the long run CVS and depression also diminish your mental and physical performance. It would also be wrong to regard omega-3 as the only substance that can solve CVS and depression. The truth is that the causes of depression and chronic fatigue syndrome are not fully understood yet. For instance, scientists are exploring whether the existence of a not yet identified virus that continuously activates the immune system, endocrinological disturbances, or psychological factors may be involved. It is also possible that CVS is caused by one single factor that is yet unknown. A deficiency in omega-3 fatty acids is only a possible cause.

Prof. Maes does not bet all his money on one horse. He continues to treat patients with a total package of antidepressants, omega-3, antibiotics and nature products. It sure helped Iris. After two and a half months, she tells her doctor that she is energetic again. She can manage her household, the crying episodes have subsided, and sleep problems are a thing of the past. Iris has a positive outlook again. After six months, she can go without taking medication and nature products, and she is proudly occupying the director's chair again.

After the successful outpatient clinic in Lanaken, Prof. Maes will open a new outpatient clinic in Lier on June 1. He is also discussing the possibilities of an outpatient clinic located in a hospital in Brussels. The outpatient clinic in Lier will be located in a graceful doctor's residence on the historic Great Market. A secretary, a general physician, two physical therapists and two psychologists will assist him. Relaxation exercises and psychotherapy are all included in a patient's treatment package. Prof. Maes emphasizes that 'even though we want to think holistically, our approach has a sound scientific/medical basis. All the doctors and physical therapists are independently employed and work together with health care organisations. They are free to adjust their rates as they see fit. Health insurance still does not intervene in visits to a psychologist and that is a general problem we have to deal with. In time, the financial costs of our approach will compare favourably to the costs that a conventional treatment, which is often longer, incurs.' Prof. Maes remains hopeful that eventually outpatient clinics will be incorporated in regular hospitals. His approach has many foreign countries interested. The discussions with a hospital in Brussels only occurred after European patients requested an outpatient clinic close to the airport. Prof. Maes receives subsidies from scientific foundations and is hoping the European Community will subsidize his clinics as well. Further research in laboratories in Antwerp, Milan and Maastricht continues to focus on the benefits of omega-3, and plans for outpatient clinics in Rome, Warsaw, Oxford and Stockholm are underway.'

What's for dinner: several servings of fatty fish or a single, small capsule?

Fatty acids come in two kinds: saturated and unsaturated. Omega-3 refers to a series of unsaturated fatty acids that are present in the cell membranes of the brain. Together with other substances, they are responsible for the development of brain and nerve tissues. They also keep these tissues flexible for optimal performance. The most important omega-3 fatty acid is ALA, alpha-linolenic acid. ALA is present in algae, plankton, rapeseed, linseed, walnuts, soy and wheat germs. The body converts ALA into EPA and DHA, two essential fatty acids. Both

these fatty acids are also present in fatty fish such as eel, mackerel, herring, sardines, salmon, trout, salmon trout, fish oil and the liver of non-fatty fish. Yes, the cod-liver oil we used to take as children was beneficial. However nowadays cod-liver oil has too many contaminants (heavy metals etc.) and is no longer fit for consumption.

If you want to consume sufficient levels of omega-3, you should eat 230 grams of fatty fish or 860 grams of white fish daily. If the idea of being served several servings of fatty fish for lunch and/or dinner does not sound particularly appealing to you, don't worry. You can also take one capsule of fish oil. The fish oil in capsules has been checked for dioxins and heavy metals. And you don't have to worry about fish bones.

www.ediver.be is the website of Professor dr. Michael Maes
www.minami-nutrition.com